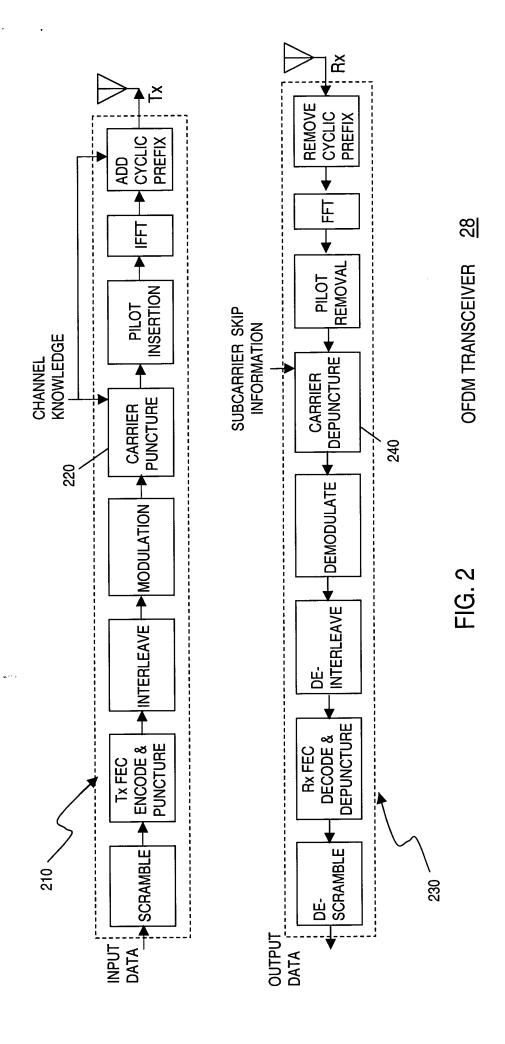
Blakely, Sokoloff, Taylor & Zafman LLP (503) 684-6200 Title: SUBCARRIER PUNCTURING IN COMMUNICATION SYSTEMS 1st Named Inventor: Valentine J. Rhodes Express Mail No.: EV325526515US Docket No.: 42P16727 Sheet: 1 of 4

APPLICATIONS 22 **PROCESSOR** MEMORY DEVICE DATA & SIGNALS 24 읾 **PROCESSOR BASEBAND** TRANSCEIVER 28 OFDM ADC ADC DAC 180 0 - 12 RECEIVER I & **TRANSMITTER** FILTER FREQUENCY FREQUENCY FILTER MIXER MIXER <u>8</u> PHASE SHIFTER PHASE SHIFTER PHASE SHIFTER PHASE SHIFTER PA PA AMP AMP 1st ANTENNA 2nd ANTENNA 16 7

P16727 Rhodes

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P16727 Rhodes

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1st Named Inventor: Valentine J. Rhodes
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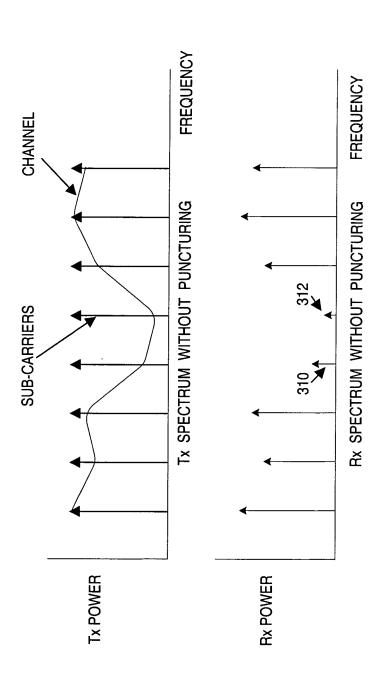


FIG. 3

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4)

FREQUENCY CHANNEL Tx SPECTRUM WITH NULL PUNCTURING SUB-CARRIERS **Rx POWER** Tx POWER

ပ 514 Ω ⋖ ш \Box 512 C $\mathbf{\omega}$ ⋖ ய 510 ш Ω

FREQUENCY

Rx SPECTRUM WITH NULL PUNCTURING

FIG. 5